Epi Update for Friday, May 3, 2019
Center for Acute Disease Epidemiology (CADE)
Iowa Department of Public Health (IDPH)

Items for this week's Epi Update include:

- **FDA approves first vaccine for dengue**
- **May 5 is World Hand Hygiene Day**
- **Lyme disease testing recommendations**
- **In the news: Cruise ship in St. Lucia quarantined over confirmed measles case**
- **In the news: "Vampire facial" may have exposed spa clients to HIV, New Mexico health officials say**
- **Infographic: Clean hands count**
- **Meeting announcements and training opportunities**

FDA approves first vaccine for dengue

The FDA has just approved the first vaccine for prevention of dengue disease. The vaccine is called *Dengvaxia* and is produced by Sanofi Pasteur. It is a live, attenuated vaccine that will cover all serotypes (1, 2, 3, and 4). It is a three dose series at 0, 6, and 12 months and is for persons 9 through 16 years of age who live in an endemic area and have previously had laboratory-confirmed dengue infection.

Dengue is the most common mosquito-borne viral disease in the world and is endemic in the U.S. territories of American Samoa, Guam, Puerto Rico and U.S. Virgin Islands. An initial dengue infection is typically mild and may not cause any symptoms at all. However, subsequent infections can be quite serious and may lead to dengue hemorrhagic fever (DHF) which can be fatal. There are currently no specific treatments for dengue, other than supportive care. Three randomized, placebo-controlled studies on *Dengvaxia* involving approximately 35,000 people in endemic areas demonstrated a 76% effectiveness for preventing symptomatic, laboratory-confirmed dengue in persons aged 9 through 16 years who previously had laboratory-confirmed dengue. Reported side-effects included muscle and joint pain, fatigue, pain at the injection site and low-grade fever. It is hoped that the new vaccine will help provide protection to the estimated one third of the world's population that lives in an at-risk area for dengue infection.

For more information visit www.fda.gov/news-events/press-announcements/first-fda-approved-vaccine-prevention-dengue-disease-endemic-regions.

May 5 is World Hand Hygiene Day

Hand-washing is one of the most important ways to prevent the spread of germs that make people sick. This Sunday, May 5 is World Hand Hygiene Day and a good time to remember the appropriate way to keep hands clean. Hands should be washed for 20 seconds with soap under clean, running water. Hand sanitizer can be used when soap and water are not available but it is not as effective at removing some germs like norovirus or when hands are visibly soiled. Hands should be cleaned during the following key times:

- **Before, during,** and **after** preparing food
- **Before** eating food
- **Before** and **after** caring for someone at home who is sick with vomiting or diarrhea
- **Before** and **after** treating a cut or wound

- **After** using the toilet
- **After** changing diapers or cleaning up a child who has used the toilet
- **After** blowing your nose, coughing, or sneezing
- **After** touching an animal, animal feed, or animal waste
- **After** handling pet food or pet treats
- **After** touching garbage

For more information, visit www.cdc.gov/features/handwashing/index.html.

Lyme disease testing recommendations
CDC currently recommends a two-step process when testing blood for evidence of antibodies against the Lyme disease bacteria, *Borrelia burgdorferi* (utilizing the same blood sample).

- The first step is a test called an enzyme immunoassay (EIA) or an indirect immunofluorescence assay (IFA). If negative, no further testing of the specimen is recommended. If positive or equivocal, additional testing should be performed. The additional testing step is necessary as the EIA tests are designed to be very sensitive, and may be positive for individuals who do not have Lyme disease.
- The second step is a test called an immunoblot test, commonly, a Western blot test. Immunoblot tests for Lyme disease can detect two different classes of antibodies: IgM and IgG. IgM antibodies appear earlier, so testing for them can be helpful for identifying patients during the first few weeks of infection. However, IgM testing is more likely to give false positive results. Testing for IgG antibodies is more reliable, but can take up to 4-6 weeks to be detectable via immunoblot testing.

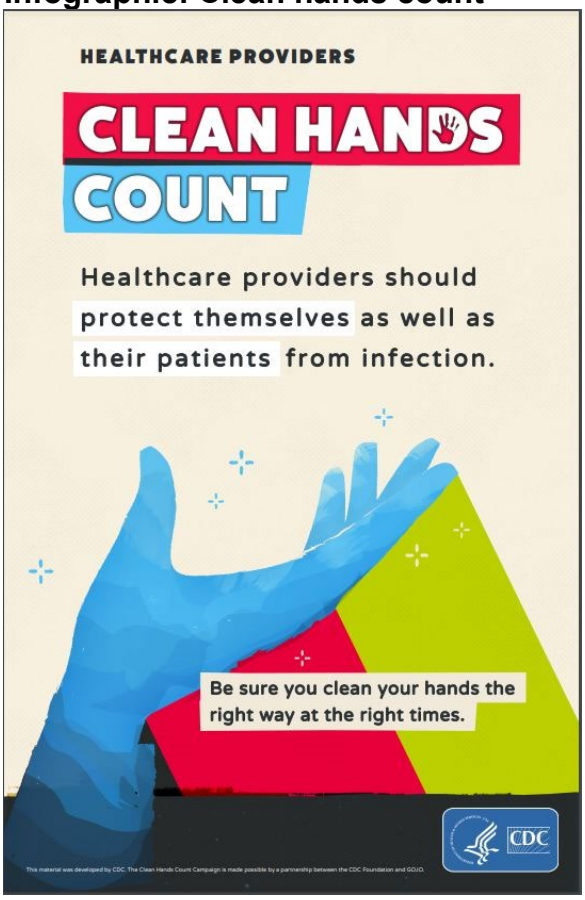
The two steps of Lyme disease testing are designed to be done in tandem. CDC does not recommend performing one test without the other. Doing so will increase the frequency of false positive results and may lead to misdiagnosis.

For more information on CDC's testing recommendations and to download a figure showing CDC's two-tiered testing decision tree,
visit: www.cdc.gov/lyme/diagnosistesting/labtest/twostep/index.html.

In the news: Cruise ship in St. Lucia quarantined over confirmed measles case
www.nbcnews.com/news/us-news/cruise-ship-st-lucia-quarantined-over-confirmed-measles-case-n1000751

In the news: "Vampire facial" may have exposed spa clients to HIV, New Mexico health officials say
www.abc15.com/news/national/-vampire-facial-may-have-exposed-spa-clients-to-hiv-new-mexico-health-officials-say

Infographic: Clean hands count



To view in full size, visit www.cdc.gov/handhygiene/pdfs/Provider-Poster-Clean-Hands-Count-508.pdf.

Meeting announcements and training opportunities
None

Have a healthy and happy week!
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